

SYSTEM AND METHOD FOR AUTOMATED PART-NUMBER MAPPING

ABSTRACT OF THE DISCLOSURE

Automated mapping of part numbers associated with parts in a bill of materials (BOM) submitted by a BOM originator to internal part numbers assigned to those parts by a BOM receiver is performed by one or more computers connected to one or more networks through one or more network interfaces. A first receive component receives one or more data sets containing historical data on bills of materials received in the past by the BOM receiver.

A second receive component receives one or more data sets containing known mappings between internal part numbers used by the BOM receiver, and part numbers used by various BOM originators. A third receive component receives one or more data sets containing information of various parameters and their values describing the parts to which the BOM receiver has assigned internal part numbers. A fourth receive component receives one or more methods of automatically learning models for predicting internal part numbers from the above mentioned historical BOM data, mapping data and part parametric data. A learning component learns the models from the data. A fifth receive component receives a BOM from a requesting process. The BOM has one or more parts with a missing internal part number. A mapping component applies the learned models to the received BOM to automatically determine internal part numbers for all unmapped BOM originator part numbers. A release process assigns internal part numbers to all unmapped parts in the BOM and releases the BOM to the requesting process.